UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,832	10/07/2004	Alvin Liknes	04-01021	5831
34111 Maxey Law Of	7590 07/21/200 fices, PLLC	EXAMINER		
13630 58TH ST. NORTH			BERTHEAUD, PETER JOHN	
SUITE 101 CLEARWATER, FL 33760			ART UNIT	PAPER NUMBER
			3746	
			MAIL DATE	DELIVERY MODE
			07/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/711,832	LIKNES, ALVIN
Office Action Summary	Examiner	Art Unit
	PETER J. BERTHEAUD	3746
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLEWHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stature than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tid d will apply and will expire SIX (6) MONTHS fron te, cause the application to become ABANDONI	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on <u>06 I</u>	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) <u>1-15</u> is/are pending in the application 4a) Of the above claim(s) <u>9-15</u> is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-8</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	vn from consideration.	
Application Papers		
9) ☐ The specification is objected to by the Examin 10) ☑ The drawing(s) filed on 07 October 2004 is/ard Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examination is objected.	e: a)⊠ accepted or b)⊡ objected e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority documer application from the International Burea * See the attached detailed Office action for a lis	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal 6) Other:	ate

Application/Control Number: 10/711,832 Page 2

Art Unit: 3746

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-8 in the reply filed on 5/6/2008 is acknowledged. Therefore, claims 9-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soderberg 4,490,095 in view of Watson 3,646,833.

Soderberg discloses a hydraulic fluid displacement pump comprising: a pump body 24 having an exterior surface and defining an axial bore (see 53) comprising a first chamber 52 and a second chamber (see chamber which houses 98 in Fig. 1) which are separated by a diametrically reduced section 96 of said axial bore, said pump body further defining at least one gas vent 44 extending from said exterior surface into said first chamber 52, a fluid inlet port 66 extending from said exterior into said second chamber, and a fluid discharge port 75 extending from said exterior thereof into said second chamber; a hydraulic head (see 99, 98, and bottom end of 53 in Fig. 1) attached

Application/Control Number: 10/711,832

Art Unit: 3746

to said pump body; a displacement plunger 72, said displacement plunger extending from said hydraulic head through said axial bore (53) and which is operated by said hydraulic head to be reciprocated within said axial bore, said displacement plunger 72 defining a vent passage (see how slanted top end of piston 72 helps to define a passage, with the help of chamber 52 and conduit 44, that vents gas) through a distal end thereof; a hydraulic circuit (see elements above reference numeral 18 in Fig. 1), wherein said hydraulic circuit is connected to said hydraulic head (via 28); a fluid discharge conduit 28 connected to said fluid discharge port 75; a first check valve 50 inline with said fluid discharge conduit 28; and a lift tube 68, wherein said lift tube 68 is in fluid communication with said discharge conduit 28. Furthermore, it would be obvious that first and second check valves could be placed inline with said fluid discharge conduit 28 and connected to said fluid inlet port 66 because placing check valves in fluid conduits to prevent backflow is well known in the art. Soderberg further discloses that said first chamber 52 and said second chamber are of diameters which are greater then the diameter of said displacement plunger 72; wherein said first chamber 52 and said second chamber are fluidically sealed from one another by said displacement plunger (see how plunger 72 seals against seals 88 and 85) extending through said diametrically reduced section. Soderberg further discloses a casing 26, 32 having an interior volume, said casing 26, 32 enclosing said pump body 24 and said hydraulic head within said interior volume, said casing 26, 32 defining a first fluid passage in fluid communication with said interior volume at a first end thereof and a second fluid passage in fluid communication with said interior volume at a second end thereof (see

Page 3

Art Unit: 3746

how 32 has passages throughout its length); and wherein said lift tube 68 is attached to said casing (26) and is sealed from said interior volume thereof. However, Soderberg does not teach the following claimed limitations taught by Watson.

Page 4

Watson teaches a hydraulic circuit comprising a prime mover, a hydraulic valve assembly (see bottom half of Fig. 1), and a hydraulic cylinder 52 which is fitted with a floating piston 54, wherein said hydraulic circuit is connected to a hydraulic head 36; wherein said hydraulic circuit utilizes two separate working fluids (see col. 2, lines 50-63); wherein one working fluid is of a lower specific gravity than the other working fluid; further comprising a control system (see bottom left side of Fig. 1, and col. 2, lines 64-75) operatively connected to said hydraulic circuit to control the reciprocation of a displacement plunger (see 42). Watson discloses the claimed invention except for there being a pair of hydraulic cylinders. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement two hydraulic cylinders in order to have controllable hydraulic pressure on each side of the piston 42 (as opposed to gravity), since such a modification would amount to a mere duplication of parts. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)) (see MPEP 2144.04 VI. B – Duplication of Parts).

Therefore, it would have been obvious at the time of invention to have modified the pump assembly of Soderberg by implementing a hydraulic circuit comprising a prime mover, a hydraulic valve assembly, and a pair of hydraulic cylinders, which uses

Art Unit: 3746

two different working fluids, as taught by Watson, in order to more efficiently control the stroke of the plunger (see col. 1, lines 60-72).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soderberg 4,490,095 in view of Watson 3,646,833, and in further view of Potschin 6,142,443.

Soderberg in view of Watson discloses the invention as discussed above.

However, Soderberg in view of Watson does not teach the following claimed limitations taught by Potschin.

Potschin discloses a valve for controlling fluids comprising a hydraulic fluid, wherein the hydraulic fluid is diesel fuel (see col. 2, lines 45-51).

Therefore, it would have been obvious at the time of invention to have modified the pump assembly of Soderberg in view of Watson by implementing diesel fuel as one of the hydraulic fluids, as taught by Potschin, because of its physical properties.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use diesel fuel in the hydraulic circuit in order to achieve minimum wear on various components due to its lubrication characteristics. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960)) (see MPEP 2144.07 - Art Recognized Suitability for an Intended Purpose).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER J. BERTHEAUD whose telephone number is (571)272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/ Supervisory Patent Examiner, Art Unit 3746

PJB /Peter J Bertheaud/ Examiner, Art Unit 3746